

REMARKS

Applicants request favorable reconsideration and allowance of the subject application in view of the preceding amendments and the following remarks.

Claims 13-23, 25, 38-45, 50, 63-75, 83, 99-103, 108-111, 113-116, 121-124, 126-129, 134-137, 139, 141-171 and 175-191 are presented for consideration. Claims 13, 38-41, 63-66, 83, 139 and 156 are independent. Claims 24, 49, 98, 140 and 172-174 have been canceled without prejudice or disclaimer. Claims 13, 15, 38, 42, 45, 50, 67, 71-75, 83, 139 and 156 have been amended to clarify features of the subject invention, while claims 175-191 have been added to recite additional features of the subject invention. Support for these changes and these claims can be found in the original application, as filed. Therefore, no new matter has been added.

Applicants note with appreciation that claims 39-41, 63-75, 108-111, 121-24 and 134-137 have been indicated as being allowable over the art of record. In addition to these claims being allowable, Applicants submit that claims 13-23, 25, 42-45, 50, 83, 99-103, 113-116, 126-129, 139, 141-171 and 175-191 patentably define features of the exposure apparatus of the present invention. Therefore, Applicants request favorable reconsideration and withdrawal of the rejections set forth in the above-noted Office Action.

Claims 13-25, 38, 42-45, 50, 83, 98-103, 113-116, 26-129 (*sic* 126-129) and 139-174 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The Examiner asserted that the specification does not adequately describe the claimed recitation of “wherein an exposure amount applied by said first exposure

means to the predetermined exposure region is less than a permissible amount.” This rejection is respectfully traversed. Nevertheless, to expedite prosecution, Applicants have amended independent claim 13, for example, to define that the two types of exposures are carried out simultaneously, whereas the language noted by the Examiner has been deleted. Applicants submit that the now-recited features find ample support in subject disclosure. Therefore, Applicants request reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, first paragraph.

Claims 13-25, 38, 42-45, 50, 83, 98-103, 113-116, 126-129 (*sic* 126-129) and 139-174 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, the Examiner asserted that the phrase “wherein an exposure amount applied by said first exposure means to the predetermined exposure region is less than a permissible amount” recited in claims 13, 38, 139, 156 and 172 is vague and indefinite. This rejection also is respectfully traversed. Nevertheless, as discussed above, Applicants have amended independent claim 38, for example, to define that the two types of exposures are carried simultaneously and to delete the clause noted by the Examiner. Applicants submit that one having ordinary skill in the art would readily understand Applicants’ invention, as recited in independent claim 13, for example. Therefore, Applicants request favorable reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, second paragraph, as well.

Turning now to the art rejections, claims 13-19, 21-25, 100-103 and 126-129 were rejected under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 5,863,712 to Von Bunau et al. or, in the alternative, under 35 U.S.C. § 103 as being unpatentable over U.S.

Patent No. 5,617,181 to Yanagihara et al. Applicants submit that the cited art, whether taken individually or in combination, does not teach many features of the present invention as previously recited in independent claim 13, for example. Therefore, these rejections are respectfully traversed. Nevertheless, Applicants submit that independent claim 13, for example, as presented, amplifies the distinctions between the present invention and the cited art.

In one aspect of the invention, independent claim 13 recites an exposure apparatus that includes first exposure means for illuminating a predetermined mask with light of a predetermined wavelength under a first mask-illumination condition, to print a first pattern on a predetermined exposure region, and second exposure means for illuminating the predetermined mask with light of the predetermined wavelength under a second mask-illumination condition, different from the first mask-illumination condition to superposedly print a second pattern on the predetermined region where the first pattern has been printed. A first exposure by the first exposure means and a second exposure by the second exposure means are carried out simultaneously, prior to a development process.

Applicants submit that the cited art does not teach or suggest such features as recited in independent claim 13, for example.

The Von Bunau et al. patent shows multiple exposure using a plurality of stops of different shapes, disposed at the pupil position in a projection lens system. In that patent, an exposure operation using one of the different stops is carried out, and, after that, another stop is mounted and another exposure operation is mounted using the second stop. Applicants

submit, therefore, that in the Von Bunau et al. patent, the first and second exposures are carried out sequentially, by using different stops.

The Examiner relies on the Yanagihara et al. patent for disclosing an exposure apparatus and a corresponding method for performing multiple exposure while changing an exposure condition, wherein an exposure amount applied by exposure means to a predetermined region is controlled to be not greater than a predetermined exposure amount.

Applicants submit, however, that neither the Von Bunau et al. patent nor the Yanagihara et al. patent teaches or suggests the salient features of Applicants' present invention, as recited in independent claim 13, for example, in which plural exposures, such as first and second exposures, can be carried out simultaneously, in which the different exposures can be based on different illuminations having, for example, different illumination conditions, spatial frequencies or polarization states.

Applicants submit, therefore, that the present invention, as recited in independent claim 13, for example, is also patentably defined over the cited art.

Dependent claims 14-23, 25, 100-103, 113-116, 126-129, 175 also should be deemed allowable, in their own right, for defining other patentable features of the present invention in addition to those recited in independent claim 13. Further individual consideration of these dependent claims is requested.

Applicants further note that no art has been cited against the present invention recited in independent claim 139. Accordingly, Applicants likewise submit that the present invention,


as recited in that claim, as well as the various claims depending therefrom, also should be deemed allowable over the cited art.

Applicants further submit that this Amendment After Final Rejection clearly places this application in condition for allowance. This Amendment was not earlier presented because Applicants believed that the prior Amendment placed the application in condition for allowance. Accordingly, entry of the instant Amendment, as an earnest attempt to advance prosecution and reduce the number of issues, is requested under 37 CFR 1.116.

Favorable reconsideration, withdrawal of the rejections set forth in the above-noted Office Action and an early Notice of Allowance are also requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should be directed to our address listed below.

Respectfully submitted,



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